TEJUS
CONSULTANTS

## TEST REPORT

| | |
|---|---|
| Clients | Brahath Bangalore Mahanagara Palike |
| Project | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yelahanka New Town. |
| Consultants | TEJUS CONSULTANTS Basaveshwar Nagar Bangalore |
| Contractor | Sri.k Gopireddy |
| Total Weight in gm: | 3000 |

### SIEVE ANALYSIS

| | | | |
|---|---|---|---|
| Type of Material | 40 mm down size | Proposed Use | PCC |
| Sample Location | MIG Park Sump | Date of Sampling | 28-06-2020 |
| | | Date of Testing | 29-06-2020 |

| IS Sieve Size | Weight Retained in gm | Cum. Weight Retained in gm | Cumulative Weight Retained in % | Cumulative Weight Passing in % | Specific Limits as per IS 383-1970 (RA-2007) % of Passing For Graded Aggregate of Nominal Size |
|---|---|---|---|---|---|
| 80.00mm | 0 | 0 | 0.00 | 100.00 | 100 |
| 63.00mm | 0 | 0 | 0.00 | 100.00 | - |
| 40.00mm | 92 | 92 | 3.07 | 96.93 | 95-100 |
| 20.00mm | 1390 | 1482 | 49.40 | 50.60 | 30-70 |
| 10.00mm | 970 | 2452 | 81.73 | 18.27 | 10-35 |
| 4.75mm | 452 | 2904 | 96.80 | 3.20 | 0-5 |
| Pan | 96 | 3000 | 100.00 | 0.00 | |

Remarks : Satisfactory / Not Satisfactory

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3. Any Query regarding the report must be reported reported within 15days from the date of testing.
4.The material used in the site satisfied the standard of MORTH's 5th revision and hence can be used in the work.

TEJUS CONSULTANTS

Authorised Signatory

A.E.E. 28/6/2020

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| TEST REPORT | |
|---|---|
| **Clients** | BRUHAT BENGALORE MAHANAGARA PALIKE |
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| **Consultants** | TEJUS CONSULTANTS Basaveshwar Nagar Bangalore |
| **Contractor** | Sri.K.Gopireddy |

## SPECIFIC GRAVITY AND WATER ABSORPTION

### FINE AGGREGATE (IS-2386-PART-3)

| | | | |
|---|---|---|---|
| **Type of Material** | Fine aggregate (M sand) | **Proposed Use** | PCC |
| **Location/Source** | MIG Park Sump | **Date of Sampling** | 28-06-2020 |
| **Period of Soaking** | 24 hours | **Date of Testing** | 29-06-2020 |

| Sl. No. | Test Property | | TRIAL - 1 | TRIAL - 2 | TRIAL - 3 | |
|---|---|---|---|---|---|---|
| A | Weight of sturated surface dry sample gm. | | 665 | 638 | 670 | |
| B | Weight of oven - dry sample gm. | | 656 | 630 | 662 | |
| C | Weight of Pycnometer Filled with water gm | | 1275 | 1275 | 1275 | |
| D | Weight of Pycnometer + sample + water gm | | 1693 | 1676 | 1696 | |
| E | Bulk specific gravity | B / ( C + A - D ) | 2.656 | 2.658 | 2.659 | 2.658 |
| G | Absorption (%) | ( A - B ) *100 / B | 1.372 | 1.270 | 1.208 | 1.283 |

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| TEST REPORT | |
|---|---|
| **Clients** | Bruhat Bangalore Mahanagara Palike |
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| **Consultants** | Tejus Consultants, Bangalore |
| **Contractor** | Sri.K.Gopireddy |

**SIEVE ANALYSIS**

| | | | |
|---|---|---|---|
| **Total Weight:** | **3000** gms | | |
| **Type of Material** | **Fine aggregate (M sand)** | **Proposed Use** | PCC |
| **Sample Location** | MIG Park Sump | **Date of Sampling** | 29-06-2020 |
| | | **Date of Testing** | 29-06-2020 |

| IS Sieve Size | Weight Retained | Cum. Weight Retained | Cum. % Retained | Cum. % Passing | Spec. Limit (%) Passing (Zone-II) |
|---|---|---|---|---|---|
| 10.00 mm | 0 | 0 | 0 | 100.00 | 100 |
| 4.75 mm | 214 | 214 | 7.13 | 92.87 | 90 - 100 |
| 2.36 mm | 326 | 540 | 18.00 | 82.00 | 75 - 100 |
| 1.18 mm | 420 | 960 | 32.00 | 68.00 | 55 - 90 |
| 0.600 mm | 488 | 1448 | 48.27 | 51.73 | 35 -59 |
| 0.300 mm | 750 | 2198 | 73.27 | 26.73 | 8-30 |
| 0.150 mm | 632 | 2830 | 94.33 | 5.67 | 0 - 10 |
| Pan | 170 | 3000 | | | - |
| | | | | | |

**Remarks :** Satisfactory / Not Satisfactory

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A.E. for (Project)

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## Test Report on Cement

| | |
|---|---|
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| **Client** | Bruhat Bangalore Mahanagar Palike |
| **Consultant** | TEJUS CONSULTANTS |
| **Contractor** | Sri.K.Gopireddy |
| **Sample ID** | Cement (ACC Cement) OPC 43 Grade |
| **Date of Sample Tested** | 29-06-2020 |
| **Sample Supplied By** | Agency |

| Sl.No. | Descriptions | Test Method as per IS | Test Result | Requirements as per IS: 12269-1987 |
|---|---|---|---|---|
| 1 | a) Initial Setting Time | IS-4031 (Part-5) | 105 Minutes | Not Less than 30 Minutes |
| | b) Final Setting Time | IS-4031 (Part-5) | 492Minutes | Not More than 600 Minutes |
| 2 | Soundness | IS-4031 (Part-3) By the Le-Chatelier method | 7mm | Not More than 10 mm |
| 3 | Standard Consistency | IS-4031 (Part-4) | 27.00% | 25 % to 35 |

A.E.E (Project)

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2. The results indicated above are based on the tests carried out on the samples received in the laboratory /Site.
3. Any Query regarding the report must be reported reported within 15daya from the date of testing.
4.The material used in the site satisfied the standard of MORTH's 5th revision and hence can be used in the work.

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Highway / Building Material Testing | Structural Strengthening Solutions
Quality Control / Assurance / Audit | Proof Checking (Structural Designs & Drawings)
Soil Stabilization and Shoring Services | Non - Destructive Testing

Job No:CECTC-MT-IWD-073-2020-21

Date: 14.07.2020

# TEST RESULTS OF PHYSICAL PROPERTIES OF REINFORCEMENT STEEL

| | | |
|---|---|---|
| Client | : | **Bruhat Bangalore Mahanagar Palike.** |
| Contractor | : | **Sri. k. Gopireddy,** Contractor, Bangalore. |
| Name of Consultant | : | **Tejus Consultants** |
| Name of Work | : | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| Sample Identification | : | 8mm, 10mm 12mm, 16mm. TMT Fe 500 Bars |
| Technical Reference | : | IS 1786:2008, IS 1608:2005, IS 1599:1985 (Reaffirmed 2006) |
| Date of test: | : | 14.07.2020 |

A.E.E. (Project)

| SLNo | Nominal size (dia in mm) | Mass per metre (kg/metre) | TENSILE STRENGTH | | |
|---|---|---|---|---|---|
| | | | 0.20 % proof stress/ yield stress ($N/mm^{2)}$ | Tensile strength ($N/mm^{2)}$ | Elongation, percent on gauge length |
| 1 | 8 | 0.399 | 515 | 563 | 17 |
| 2 | 10 | 0.622 | 521 | 572 | 18 |
| 3 | 12 | 0.889 | 532 | 585 | 19 |
| 4 | 16 | 1.585 | 547 | 599 | 20 |

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3. Any Query regarding the report must be reported within 15 days from the date of testing.

For Civil Experts

Authorised Signature

# 174, Sri Ranga Complex, Amrutha Nagar Main Road, New Bank Colony, Konanakunte, Bangalore - 560 062.
Mobile : +91 97429 59595 | Tel/Fax : 080 2632 2565 | Email : civilexpertsltd@gmail.com | URL : www.civilexperts.co.in

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## TEST REPORT

| | | | | | |
|---|---|---|---|---|---|
| **Clients** | Bruhat Bangalore Mahanagara Palike | | | | |
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. | | | | |
| **Consultants** | TEJUS CONSULTANTS Basaveshwar Nagar Bangalore | | | | |
| **Contractor** | Sri.K.Gopireddy | | | | |
| **Total Weight:** | 10000 | gms | | | |

### SIEVE ANALYSIS

| | | | | | |
|---|---|---|---|---|---|
| **Type of Material** | 20 mm down size | | **Proposed Use** | Concrete | |
| **Sample Location** | At Plant | | **Date of Sampling** | 19-07-2020 | |
| | | | **Date of Testing** | 20-07-2020 | |
| **IS Sieve Size** | **Weight Retained** | **Cum. Weight Retained** | **Cum. % Retained** | **Cum. % Passing** | **Spec. Limit (%) Passing** |
| **40.00 mm** | 0 | 0 | 0 | 100 | 100 |
| **20.00 mm** | 288 | 288 | 2.88 | 97.12 | 95 - 100 |
| **10.00 mm** | 4812 | 5100 | 51.00 | 49.00 | 25 - 55 |
| **4.75 mm** | 4230 | 9330 | 93.30 | 6.70 | 0 - 10 |
| **Pan** | 670 | 10000 | | | |

**Remarks :** Satisfactory / Not Satisfactory

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4. The material used in the site satisfied the standard of MORTH's 5th revision and hence can be used in the work.

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Authorised Signatory

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| TEST REPORT | |
|---|---|
| Clients | BRUHAT BENGALORE MAHANAGARA PALIKE |
| Project | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| Consultants | TEJUS CONSULTANTS Basaveshwar Nagar Bangalore |
| Contractor | Sri.k.Gopireddy |

## SPECIFIC GRAVITY AND WATER ABSORPTION

### FINE AGGREGATE (IS-2386-PART-3)

| | | | |
|---|---|---|---|
| Type of Material | M sand | Proposed Use | concrete |
| Location/Source | At Plant | Date of Sampling | 19-07-2020 |
| Period of Soaking | 24 hours | Date of Testing | 20-07-2020 |

| Sl. No. | Test Property | TRIAL - 1 | TRIAL - 2 | TRIAL - 3 | |
|---|---|---|---|---|---|
| A | Weight of sturated surface dry sample gm. | 652 | 667 | 645 | |
| B | Weight of oven - dry sample gm. | 644 | 659 | 637 | |
| C | Weight of Pycnometer Filled with water gm | 1275 | 1275 | 1275 | |
| D | Weight of Pycnometer + sample + water gm | 1684 | 1694 | 1680 | |
| | Bulk specific gravity $\frac{B}{(C+A-D)}$ | 2.650 | 2.657 | 2.654 | **2.654** |
| G | Absorption (%) $\frac{(A-B)*100}{B}$ | 1.242 | 1.214 | 1.256 | **1.237** |

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A.E.E. (Project)

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## TEST REPORT

| | |
|---|---|
| **Clients** | Bruhat Bangalore Mahanagara Palike |
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| **Consultants** | Tejus Consultants, Bangalore |
| **Contractor** | Sri.K.Gopireddy |

### SIEVE ANALYSIS

| | | | |
|---|---|---|---|
| **Total Weight:** | 3000 gms | | |
| **Type of Material** | M sand | **Proposed Use** | concrete |
| **Sample Location** | At Plant | **Date of Sampling** | 20-07-2020 |
| | | **Date of Testing** | 20-07-2020 |

| IS Sieve Size | Weight Retained | Cum. Weight Retained | Cum. % Retained | Cum. % Passing | Spec. Limit (%) Passing (Zone-II) |
|---|---|---|---|---|---|
| 10.00 mm | 0 | 0 | 0 | 100.00 | 100 |
| 4.75 mm | 205 | 205 | 6.83 | 93.17 | 90 - 100 |
| 2.36 mm | 329 | 534 | 17.80 | 82.20 | 75 - 100 |
| 1.18 mm | 422 | 956 | 31.87 | 68.13 | 55 - 90 |
| 0.600 mm | 486 | 1442 | 48.07 | 51.93 | 35 -59 |
| 0.300 mm | 773 | 2215 | 73.83 | 26.17 | 8-30 |
| 0.150 mm | 633 | 2848 | 94.93 | 5.07 | 0 - 10 |
| Pan | 152 | 3000 | | | - |
| | | | | | |

**Remarks :** Satisfactory / Not Satisfactory

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Authorised Signatory

JE
A.E.E (Revised)

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## TEST REPORT

| | | | | | |
|---|---|---|---|---|---|
| **Clients** | Bruhat Bangalore Mahanagara Palike | | | | |
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. | | | | |
| **Consultants** | TEJUS CONSULTANTS | | | | |
| **Contractor** | Sri.K.Gopireddy | | | | |
| **Total Weight:** | 10000 | gms | | | |

## SIEVE ANALYSIS

| | | | | | |
|---|---|---|---|---|---|
| **Type of Material** | **12.5 mm down size** | | **Proposed Use** | CONCRETE | |
| **Sample Location** | At Plant | | **Date of Sampling** | 19-07-2020 | |
| | | | **Date of Testing** | 20-07-2020 | |
| **IS Sieve Size (in mm)** | **Weight Retained** | **Cum. Weight Retained** | **Cum. % Retained** | **Cum. % Passing** | **Spec. Limit (%) Passing** |
| 20.0 | 0 | 0 | 0 | 100 | 100 |
| 12.5 | 562 | 562 | 5.62 | 94.38 | 90-100 |
| 4.75 | 4624 | 5186 | 51.86 | 48.14 | 40-85 |
| Pan | 4312 | 9498 | 94.98 | 5.02 | 0-10 |
| | 502 | 10000 | | | |
| | | | | | |

**Remarks :** Satisfactory / Not Satisfactory

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JE
A.E.E. (Project)

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## Test Report on Cement

| | |
|---|---|
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| **Client** | Bruhat Bangalore Mahanagar Palike |
| **Consultant** | TEJUS CONSULTANTS |
| **Contractor** | Sri.K.Gopireddy |
| **Sample ID** | Cement (ACC Cement 43 Grade) |
| **Date of Sample Tested** | 20-07-2020 |
| **Sample Supplied By** | Agency |

| Sl.No. | Descriptions | Test Method as per IS | Test Result | Requirements as per IS: 12269-1987 |
|---|---|---|---|---|
| 1 | a) Initial Setting Time | IS-4031 (Part-5) | 98 Minutes | Not Less than 30 Minutes |
| | b) Final Setting Time | IS-4031 (Part-5) | 390 Minutes | Not More than 600 Minutes |
| 2 | Soundness | IS-4031 (Part-3) By the Le-Chatelier method | 5mm | Not More than 10 mm |
| 3 | Standard Consistency | IS-4031 (Part-4) | 27.00% | 25 % to 35 |

A.E.E. (Project)

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## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | |
|---|---|
| Project | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| Client | Bruhat Bangalore Mahanagar Palike |
| Consultant | TEJUS CONSULTANTS |
| Contractor | Sri.K.Gopireddy |
| Grade of concrete: | M20 |
| Size of cube: | 150x150x150 mm |
| Reference IS code: | IS:516-1959 |
| Sample Location | Sump top slab |

| Sl.No. | Date of Casting | Date of testing | Age of Test | Weight of Cube | Area of Cube | Failure load | Compressive strength | Avg. Compressive strength |
|---|---|---|---|---|---|---|---|---|
| | | | | Kg | $mm^2$ | KN | $N/mm^2$ | $N/mm^2$ |
| 1 | 23-07-2020 | 30-07-2020 | 7 days | 8.123 | 22500 | 302 | 13.42 | 13.59 |
| 2 | 23-07-2020 | 30-07-2020 | 7 days | 8.134 | 22500 | 305 | 13.56 | |
| 3 | 23-07-2020 | 30-07-2020 | 7 days | 8.148 | 22500 | 310 | 13.78 | |

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A.E.E. (Project)

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## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | |
|---|---|
| Project | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| Client | Bruhat Bangalore Mahanagar Palike |
| Consultant | TEJUS CONSULTANTS |
| Contractor | Sri.K.Gopireddy |
| Grade of concrete: | M20 |
| Size of cube: | 150x150x150 mm |
| Reference IS code: | IS:516-1959 |
| Sample | Sump top slab |

| Sl. No | Date of Casting | Date of testing | Age of Test | Weight of Cube | Area of Cube | Failure load | Compressive strength | Avg. Compressive strength |
|---|---|---|---|---|---|---|---|---|
| | | | | Kg | $mm^2$ | KN | $N/mm^2$ | $N/mm^2$ |
| 1 | 23-07-2020 | 20-08-2020 | 28days | 8.136 | 22500 | 492 | 21.87 | 21.97 |
| 2 | 23-07-2020 | 20-08-2020 | 28days | 8.145 | 22500 | 493 | 21.91 | |
| 3 | 23-07-2020 | 20-08-2020 | 28days | 8.123 | 22500 | 498 | 22.13 | |

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A.E.E. (Project)

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## AGGREGATE IMPACT VALUE
## (IS: 2386 Part - 4)

| | | | |
|---|---|---|---|
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. | | |
| **Client** | BRUHAT BANGALORE MAHANAGARA PALIKE | | |
| **Consultant** | M/s Tejus Consultants | | |
| **Contractor** | Sri.K.Gopireddy | | |
| **Proposed Use** | WMM | **Date of Sampling** | **31-07-2020** |
| **Sample Location** | **MIG Park Yalahanka** | **Date of Testing** | **31-07-2020** |

| Sl. No. | Description | | Test No. 1 | Test No. 2 | Test No. 3 | Spec Limit (%) |
|---|---|---|---|---|---|---|
| 1 | Wt. of stone pieces (dry) passing IS Sieve 12.5mm but retained in IS sieve 10mm (gm) | (Wa) | 352.00 | 348.00 | 366.00 | |
| 2 | Wt. of the fraction retained in IS sieve 2.36mm after the impact test (gm) | (Wb) | 270.00 | 265.00 | 280.00 | |
| 3 | Wt. of the fraction passed in IS sieve 2.36mm after the impact test (gm) | (Wc) | 82.00 | 83.00 | 86.00 | |
| 4 | Aggregate Impact Value (%) | (Wc/Wa)* 100 | 23.30 | 23.85 | 23.50 | |
| 5 | Average Aggregate impact value | (%) | 23.55 | | | Max - 30 % |

**Remarks :** Satisfactory / Not Satisfactory

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A.E.E. (Project)

**Note:**

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3. Any Query regarding the report must be reported reported within 90 days from the date of testing.
4. The material used in the site satisfied the standard of MORTH's 5th revision and hence can be used in the work.

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## FLAKINESS AND ELONGATION INDICES (IS 2386, PART 1)

| | |
|---|---|
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| **Client** | BRUHAT BANGALORE MAHANAGARA PALIKE |
| **Consultant** | M/s Tejus Consultants |
| **Contractor** | Sri.K.Gopireddy |

| | | | |
|---|---|---|---|
| **Type of Material** | WMM | **Proposed Use** | WMM |
| **Sample Location** | MIG Park Yalahanka | **Date of Sampling** | 31-07-2020 |
| | | **Date of Testing** | 31-07-2020 |

| **Size of aggregate** | | **Flakiness Index** | | **Elongation Index** | |
|---|---|---|---|---|---|
| **Passing through IS sieve, mm** | **Retained on IS sieve, mm** | **Total wt. of aggregate retained on sieves (A) gms.** | **Wt. of aggregate passing from Flakiness gauge (B) gms** | **Wt. of aggregate retained on Flakiness gauge (C) gms** | **Wt. of aggregate retained on Elongation gauge after retained on Flakiness gauge(D)gms** |
| 63.0 | 50.0 | 0 | 0 | 0 | 0 |
| 50.0 | 40.0 | 0 | 0 | 0 | 0 |
| 40.0 | 31.5 | 0 | 0 | 0 | 0 |
| 31.5 | 25.0 | 0 | 0 | 0 | 0 |
| 25.0 | 20.0 | 0 | 0 | 0 | 0 |
| 20.0 | 16.0 | 870 | 73 | 797 | 50 |
| 16.0 | 12.5 | 1206 | 102 | 1008 | 120 |
| 12.5 | 10.0 | 451 | 76 | 392 | 62 |
| 10.0 | 6.3 | 500 | 65 | 435 | 38 |
| **Total** | | **3027** | **316** | **2632** | **270** |

**Note:** Minimum 200 Pcs should be taken on each fraction of test

| | |
|---|---|
| Flakiness Index(%): | 10.44 |
| Elongation Index(%): | 10.26 |
| Combined FI+EL (%) | 20.70 |

JE
A.E.E. (Project)

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3. Any Query regarding the report must be reported reported within 90 days from the date of testing.
4.The material used in the site satisfied the standard of MORTH's 5th revision and hence can be used in the work.

TEJUS CONSULTANTS

Authorised Signatory

TEJUS CONSULTANTS
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## GRADATION FOR WMM
## (As per MORT&H 400-11)

| | | |
|---|---|---|
| **Name of Work** | : | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| **Client** | : | BRUHAT BANGALORE MAHANAGARA PALIKE |
| **Consultant** | : | M/s Tejus Consultants |
| **Contractor** | : | Sri.K.Gopireddy |
| **Date of Testing** | : | 31-07-2020 |
| **Type of Mix** | : | WMM |
| **Sample I/D** | : | WMM 1 |

| | | | |
|---|---|---|---|
| **Sample Location:** | MIG Park Yalahanka | **Date of Sampling:** | 30-07-2020 |
| **Type of material & Purpose:** | WMM | **Date of testing:** | 31-07-2020 |
| | | **Oven Dry Wt.(gms):** | 10000.0 |

| IS Sieve size in mm | Weight retained (gm) | Cummulative weight retained (gm) | Cummulative % of retained | Cummulative % of passing | Specification limits |
|---|---|---|---|---|---|
| 53 | 0 | 0 | 0.00 | 100.00 | 100.00 |
| 45 | 617 | 617 | 6.17 | 93.83 | 95-100 |
| 22.4 | 2526 | 3143 | 31.43 | 68.57 | 60-80 |
| 11.2 | 1786 | 4929 | 49.29 | 50.71 | 40-60 |
| 4.75 | 1459 | 6388 | 63.88 | 36.12 | 25-40 |
| 2.36 | 1355 | 7743 | 77.43 | 22.57 | 15-30 |
| 0.6 | 869 | 8612 | 86.12 | 13.88 | 8.0-22.0 |
| 0.075 | 842 | 9454 | 94.54 | 5.46 | 0-8 |
| Pan | 546 | | | | |
| Total | 10000 | | | | |

A.E.E. (Project)

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## TEST REPORT

| | |
|---|---|
| **Clients** | BRUHAT BENGALORE MAHANAGARA PALIKE |
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| **Consultants** | TEJUS CONSULTANTS Basaveshwar Nagar Bangalore |
| **Contractor** | Sri.K.Gopireddy |

## SPECIFIC GRAVITY AND WATER ABSORPTION

### FINE AGGREGATE (IS-2386-PART-3)

| | | | |
|---|---|---|---|
| **Type of Material** | Fine aggregate (M sand) | **Proposed Use** | PCC |
| **Location/Source** | MIG park Yalahanka(SSM chain link fensing) | **Date of Sampling** | 02-08-2020 |
| **Period of Soaking** | 24 hours | **Date of Testing** | 03-08-2020 |

| Sl. No. | Test Property | | TRIAL - 1 | TRIAL - 2 | TRIAL - 3 | |
|---|---|---|---|---|---|---|
| A | Weight of sturated surface dry sample gm. | | 663 | 646 | 671 | |
| B | Weight of oven - dry sample gm. | | 654 | 637 | 663 | |
| C | Weight of Pycnometer Filled with water gm | | 1275 | 1275 | 1275 | |
| D | Weight of Pycnometer + sample + water gm | | 1692 | 1682 | 1696 | |
| E | Bulk specific gravity | B / ( C + A - D ) | 2.659 | 2.665 | 2.652 | 2.659 |
| F | Absorption (%) | ( A - B ) *100 / B | 1.376 | 1.413 | 1.207 | 1.332 |

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## Test Report on Cement

| | |
|---|---|
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| **Client** | Bruhat Bangalore Mahanagar Palike |
| **Consultant** | TEJUS CONSULTANTS |
| **Contractor** | Sri.K.Gopireddy |
| **Sample ID** | Cement (ACC Cement) OPC 43 Grade |
| **Date of Sample Tested** | 03-08-2020 |
| **Sample Supplied By** | Agency |

| Sl.No. | Descriptions | Test Method as per IS | Test Result | Requirements as per IS: 12269-1987 |
|---|---|---|---|---|
| 1 | a) Initial Setting Time | IS-4031 (Part-5) | 102 Minutes | Not Less than 30 Minutes |
| | b) Final Setting Time | IS-4031 (Part-5) | 520 Minutes | Not More than 600 Minutes |
| 2 | Soundness | IS-4031 (Part-3) By the Le-Chatelier method | 6 mm | Not More than 10 mm |
| 3 | Standard Consistency | IS-4031 (Part-4) | 28.00% | 25 % to 35 |

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# TEST REPORT

| | |
|---|---|
| **Clients** | Bruhat Bangalore Mahanagara Palike |
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| **Consultants** | Tejus Consultants, Bangalore |
| **Contractor** | Sri.K.Gopireddy |

## SIEVE ANALYSIS

| | | | |
|---|---|---|---|
| **Total Weight:** | 3000 gms | | |
| **Type of Material** | **Fine aggregate (M sand)** | **Proposed Use** | PCC |
| **Sample Location** | MIG park Yalahanka(SSM chain link fensing) | **Date of Sampling** | 03-08-2020 |
| | | **Date of Testing** | 03-08-2020 |

| IS Sieve Size | Weight Retained | Cum. Weight Retained | Cum. % Retained | Cum. % Passing | Spec. Limit (%) Passing (Zone-II) |
|---|---|---|---|---|---|
| 10.00 mm | 0 | 0 | 0 | 100.00 | 100 |
| 4.75 mm | 212 | 212 | 7.07 | 92.93 | 90 - 100 |
| 2.36 mm | 318 | 530 | 17.67 | 82.33 | 75 - 100 |
| 1.18 mm | 426 | 956 | 31.87 | 68.13 | 55 - 90 |
| 0.600 mm | 470 | 1426 | 47.53 | 52.47 | 35 -59 |
| 0.300 mm | 752 | 2178 | 72.60 | 27.40 | 8-30 |
| 0.150 mm | 630 | 2808 | 93.60 | 6.40 | 0 - 10 |
| Pan | 192 | 3000 | | | - |
| | | | | | |

**Remarks :** Satisfactory / Not Satisfactory

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## TEST REPORT

| | |
|---|---|
| **Clients** | Bruhath Bangalore Mahanagara Palike |
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. |
| **Consultants** | TEJUS CONSULTANTS Basaveshwar Nagar Bangalore |
| **Contractor** | Sri.K.Gopireddy |
| **Total Weight in gm:** | 3000 |

### SIEVE ANALYSIS

| | | | |
|---|---|---|---|
| **Type of Material** | 40 mm down size | **Proposed Use** | PCC |
| **Sample Location** | MIG park Yalahanka(SSM chain link fensing) | **Date of Sampling** | 02-08-2020 |
| | | **Date of Testing** | 03-08-2020 |

| IS Sieve Size | Weight Retained in gm | Cum. Weight Retained in gm | Cumulative Weight Retained in % | Cumulative Weight Passing in % | Specific Limits as per IS 383-1970 (RA-2007) % of Passing For Graded Aggregate of Nominal Size |
|---|---|---|---|---|---|
| 80.00mm | 0 | 0 | 0.00 | 100.00 | 100 |
| 63.00mm | 0 | 0 | 0.00 | 100.00 | - |
| 40.00mm | 80 | 80 | 2.67 | 97.33 | 95-100 |
| 20.00mm | 1416 | 1496 | 49.87 | 50.13 | 30-70 |
| 10.00mm | 962 | 2458 | 81.93 | 18.07 | 10-35 |
| 4.75mm | 452 | 2910 | 97.00 | 3.00 | 0-5 |
| Pan | 90 | 3000 | 100.00 | 0.00 | |

**Remarks :** Satisfactory / Not Satisfactory

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## TEST REPORT

| | | | | | |
|---|---|---|---|---|---|
| **Clients** | Bruhat Bangalore Mahanagara Palike | | | | |
| **Project** | The work of Development of Parks and construction of Toilets at A Sector Parks in Ward No 04 Yalahanka New Town. | | | | |
| **Consultants** | TEJUS CONSULTANTS | | | | |
| **Contractor** | Sri.K.Gopireddy | | | | |
| **Total Weight:** | 10000 | gms | | | |

### SIEVE ANALYSIS

| | | | | | |
|---|---|---|---|---|---|
| **Type of Material** | **12.5 mm down size** | | **Proposed Use** | CONCRETE | |
| **Sample Location** | At Plant | | **Date of Sampling** | 13-08-2020 | |
| | | | **Date of Testing** | 14-08-2020 | |
| **IS Sieve Size (in mm)** | **Weight Retained** | **Cum. Weight Retained** | **Cum. % Retained** | **Cum. % Passing** | **Spec. Limit (%) Passing** |
| 20.0 | 0 | 0 | 0 | 100 | 100 |
| 12.5 | 523 | 523 | 5.23 | 94.77 | 90-100 |
| 4.0 | 4536 | 5059 | 50.59 | 49.41 | 40-85 |
| 4.75 | 4382 | 9441 | 94.41 | 5.59 | 0-10 |
| Pan | 559 | 10000 | | | |
| | | | | | |

**Remarks :** Satisfactory / Not Satisfactory

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